

TEMPORARY - RELOCATABLE CLASSROOM EDUCATIONAL OCCUPANCY PLAN CORRECTION LIST

Plans have been reviewed for compliance with the 1999 Standard Building Code, 1997 Standard Mechanical Code, 2003 National Fire Codes (NFPA Standards), 2003 NFPA 101 Life Safety Code, and the 1974 State Public Building Accessibility Act (2002 North Carolina Accessibility Code with the 2004 Amendments). The following list does not necessarily include all deficiencies. See additional items on the cover sheet.

PLEASE NOTE: Listed items require correction by revised plans, addenda, field orders, or change orders before plans can be approved for construction. Answers in letter form are not acceptable. **Starting construction before plans approval may be considered as just cause, by the State, to issue a stop work order. [Rule 0780-2-3-.01]**

I. PROCEDURES

- *1. Provide two copies of plans and one copy of specifications sealed (with signature and date) by a Tennessee registrant in accordance with the Architects and Engineers Licensing Law Rules. [Rule 0780-2-3-.03 and A&E Rule 0120-2-.08(3)] If revisions are submitted, two copies are required.
- *2. Provide a second set of final plans and revisions for the job site set. [Rule 0780]
- 3. Buildings must be designed to the minimum State of Tennessee adopted codes and standards.

Provide the following code information on the cover sheet of the plans for new and existing buildings:

- A. SBCCI Standard Building Code, 1999 edition, including SBCCI Standard Gas Code, 1999 edition, and SBCCI Standard Mechanical Code, 1997 edition,
 - B. Uniform Fire Code (NFPA 1), 2003 edition, including each reference in NFPA 1, Chapter 2 (excluding NFPA 5000), published by the National Fire Protection Association. Each reference in NFPA 1 Uniform Fire Code, Chapter 2 to an NFPA code or standard shall be deemed to be the edition printed in the National Fire Codes, 2003 edition.
 - C. 1974 State Public Building Accessibility Act (2002 North Carolina Accessibility Code with the 2004 Amendments).
 - D. Occupancy Group per Chapter 6, NFPA 101, 2003 edition.
 - E. Identify whether there is a proposed change of occupancy for this project. Show previous and proposed occupancies
 - F. Construction Type, protected or unprotected, sprinklered or unsprinklered per Chapter 6, 1999 SBC.
 - G. Number of stories, and/or height of building.
- 4. Provide a summary statement explaining the project's Scope of Work on the design drawing that shows the project's codes analysis.

- *5. Complete the Plans Review Submittal form and remit the required fee. [Rule 0780]
6. The fee has been calculated incorrectly. Balance due is _____. We are refunding _____. (The refund process takes approximately 6 to 8 weeks.)
7. Information on the plans review submittal form is incorrect as follows:
_____.
8. The codes referenced on your plans are not those adopted by the State of Tennessee. Please check your plans and specifications for compliance with State adopted codes.
9. Code deficiencies cited in the inspection report (dated/requested) _____ must be addressed.
- *10. Prior to any approval being granted, items with an asterisk (*) must be resolved.
11. If this is structurally identical to a model previously approved under the same codes, provide documentation (i.e., project name, TFM number, approval letter, etc.). We will then require two stamped sets of plans and a completed Plans Review Submittal form (item 3 above); however, no review fee will be required. [Rule 0780-2-3-.03(7)]
12. If this unit is constructed as a Tennessee labeled modular building unit, the manufacturer must be licensed by the Codes Enforcement Section as required by TCA Section 68-126-305(a)(3) and Rule 0780-2-13-.03.
13. One or more of the following forms are enclosed:

A. Plans Review Submittal Form	D. Sprinkler Design Intent
B. Accessibility Correction List	E. Other _____
C. Hood and Duct Design Intent	
14. **NOTE: In order to expedite processing of this project please refer to “TFM NUMBER” on the transmittal letter when submitting any correspondence, plans, specifications, etc.**

II. GENERAL

- *1. Identify use of rooms and spaces.
- *2. Provide design live load values on plans for wind, roof, floor, stairs, guard and hand railings, seismic per SBC 1607.1.2, etc. [SBC Chapter 16] For existing buildings that have not been reviewed and approved by our office, provide "as built" plans from a Tennessee licensed structural engineer or an evaluation report sealed, signed, and dated from a Tennessee licensed structural engineer. The evaluation report must show the design live loads for wind, roof, floors, stairs guard, hand railings, and seismic.
3. Provide door and door hardware schedule.
4. Provide glazing schedule. Specify size and type of glazing.
5. Provide interior finish schedule.
6. Provide a complete legend for _____.

7. Provide legend for all fire rated wall enclosures to identify specific fire ratings and their limits (i.e., smoke partitions or barriers, 30 minute, one, two, and four-hour ratings).
8. Provide and identify sections and details: _____.
9. Provide plans of equipment layout: _____.
10. Provide two copies of structural shop drawings for pre-manufactured buildings to include manufacturer's name and model number or other designation. This is needed for SBCCI pre-compliance verification. Otherwise, send two copies of structural drawings, stamped by a structural engineer registered by the State of Tennessee. Show seismic information per SBC 1607.1.2.
11. Provide manufacturer's cut sheets for the following: _____.
12. **FIRE STOPPING** Specify test number, hourly rating, and provide detail(s) in their entirety which include application instructions, material specifications and design illustrations without modification or manipulation directly on plans of current U.L. (or other approved third party nationally recognized testing laboratory) tested systems for each size and type of penetrating object such as metallic and nonmetallic electrical, plumbing, HVAC piping and ductwork, fire protection piping, electrical wiring, or conduit through fire resistive assemblies SBC 705.4 and NFPA 101 8.3.5. The details must be provided directly in the plan set and not in Architectural Supplemental Instruction (ASI), addenda, or within the specifications or project manual. Provide plumbing details for toilet, shower, and tub penetrations at 1-hour fire rated floor assemblies and plumbing penetrations within walls when penetrating 1-hour rated floor assemblies. UL permits the free duplication and inclusion for design professionals in their designs (see "Important Information For Users Of This Directory, Use of This Directory" in Volume 1 of the most recent printed Fire Resistance Directory – or – at the bottom of each "record" (i.e., UL system number) on the online certification directory available <http://www.ul.com> for UL's terms and conditions of use).
13. Provide a reflected ceiling plan showing lights, diffusers, sprinkler head, smoke detector, etc.

III. **SITE**

- *1. Show location and footprint of all existing structures, property lines, grade elevations, water mains and other utilities, fire department access and all ingress/ingress to public ways. Include size and location of LP-Gas storage tanks (2001 NFPA 58) and any other above ground storage tanks (2000 NFPA 30 and 30A).
2. Tennessee labeled modular building units, and temporary units should be 50 feet minimum from the main building and 50 feet minimum from one another. If spaced closer than above recommendations, show compliance with SBC Table 500 and Table 600. See **ELECTRICAL** items numbered 5 and 6 for additional fire alarm requirements.
3. Provide exterior accessibility ramp detail to meet maximum 1 in 12 or 8.33% slope. [NCAC Chapter 5]
4. A fire department access road shall be provided so as to extend to within 50 feet of a single exterior door providing access to the interior of the building. [2003 NFPA 1 18.2.2.2]

IV. CONSTRUCTION

1. Foundations must comply with SBC 1604.7, SBC 1804, and SBC 2303.2 or unit must be anchored according to manufacturer's set-up instructions with an engineer approved stabilizing system. PROVIDE COPY OF MANUFACTURER'S SET-UP INSTRUCTIONS.
2. Ventilation of foundation must comply with SBC 1804.6.3.1.
3. Glazing in 1-hour fire rated walls must be wired glass or other tested glazing material, in steel frames, no larger than 1,296 square inches with no dimension greater than 54 inches. [SBC 704.2.1.5 and 1999 NFPA 80 Chapter 13]
4. Skylights or glazing at an angle less than 15 degrees with the vertical must be glazed in compliance with SBC 2405.3.1, 2407, and 2604.
5. Glazing in non-rated doors, sliding doors, storm doors, within 24 inches of doors, 18 inches above finished floor, and exceeding 9 square feet within 36 inches of walking surface must be safety glazed, tempered, and pass the test requirements of CPSC 16 - CFR, part 1201 and comply with ANSI Z97.1. [SBC 2405.1 and .2]
6. Glazing in fire rated doors must be wired glass or other tested glazing material, and must be limited in size according to door rating. [SBC 705.1.3.6]
7. Specify that fire rated doors must have fire rated frames, hardware, closers and other rated accessories. [1999 NFPA 80 1-4 Definition of "Fire Door", 1999 NFPA 80 1.6, 2.3.1, 2.4.3, 2.4.7, and SBC 705.1.3]
8. Closers and positive latching hardware are required on fire rated doors and doors in smoke tight partitions or barriers. [NFPA 101 7.2.1.8, 1999 NFPA 80 3-4, and SBC 705.1.3.5]
9. Rooms 50 square feet or greater used for storage, and any size janitor closet, must be 1-hour enclosed with a 45-minute fire rated door assembly **or** protected by an automatic sprinkler system and smoke tight partitions and solid doors with self closers. [NFPA 101 14.3.2.1(1), (2), (3), (4), 8.7.1, 8.7.1.2, 8.4, and 9.7.1]
10. Boiler and furnace rooms must be enclosed in 1-hour fire rated construction. [SBC 704.1.3.3.1 and NFPA 101 8.4.1]
11. Provide attic ventilation complying with SBC 2309.7 (1:250 for flat roofs and 1:150 for gable and hip roofs).
12. For unsprinklered, unprotected construction, floors located immediately above usable space in basements must have a fire resistant rating of not less than one hour. [SBC Table 600 Note O]

V. MEANS OF EGRESS

- **1. The floor on both sides of any door must be substantially level and may not vary more than ½ inch for a distance at least equal to the width of the widest leaf. [NFPA 101 7.2.1.3 and SBC 1012.1.3]

- **2. Handicapped ramp must be 1:12 maximum slope, 48 inches wide, and terminating at a 60 inch by 60 inch platform with at least 18 inches beyond the strike jamb on the pull side of the door. [NCAC 3.2, 5.2.2, 5.3, 5.3.3, and 7.3.1]
- 3. New Handrails shall be installed to provide a clearance of not less than 2¼" between the handrail and the wall to which it is fastened if wall is a rough surface such as cmu block and brick and 1½" clearance acceptable for smooth surfaces such as gypsum wallboard. [2003 NFPA 101 7.2.2.4.4.5 and A.7.2.2.4.4.5]
- **4. Handrails and guards must be in accordance with NFPA 101 7.2.2.4, SBC 1007.5, SBC 1015, and NCAC 8.3 such as 34" minimum to 38" maximum and 42" to top of handrails and guards; handrails on both side of stairs; 23" minimum handrail extension on wall side at bottom of stair; and four inch maximum diameter sphere for intermediate rails in guards. Guardrails are required on the open side of stairs 30 inches above floor surface. [NFPA 101 7.1.8 and 7.2.2.4]
- **5. Stair landings must be 48 inches maximum in depth per SBC 1007.4.2.
- **6. Stair treads must be minimum 11 inches and risers must be maximum 7 inches but not less than 4 inches without square nosing and must be designed in accordance with NFPA 101 7.2.2.2.1, 7.2.2.3.4, SBC 1007.3.1, and NCAC Chapter 8.2.
- **7. Door swing may not reduce landing to less than one-half its required width. [NFPA 101 7.2.1.4.4 and SBC 1012.1.5]
- 8. Each leaf of door in the means of egress must provide 32 inches clear opening and a minimum height of 6'-8", but in no case must any single door exceed 48 inches. [NFPA 101 7.2.1.2.4, SBC Table 1004, and 1012.1.1]
- 9. Required exit path cannot be obstructed. [NFPA 101 7.1.10 and SBC 1017]
- 10. Doors serving 50 people must swing with the direction of exit travel. [SBC 1012.1.2 and NFPA 101 7.2.1.4.2]
- 11. Number of exits must comply with NFPA 101 7.4.1 and SBC 1004.2.1.
- 12. Double asterisk (**) items may be addressed by owner if not in contract.
- 13. Every assembly area shall have the occupant load posted in a conspicuous place near the main exit of the room. [SBC 403.1.2.2 and NFPA 101 12.7.8.3]

VI. INTERIOR

- 1. Flamespread rating of interior finish must be Class A or B Steinter Tunnel Test. [NFPA 101 14.3.3] See NFPA 101 Chapter 10.2 and SBC 803.2 for classification definitions.
- 2. Carpet in corridors must withstand 0.22 watts/cm² Radiant Panel Test (Class II). [SBC 803.8.2]
- 3. Carpet on walls and ceilings must be Class A. [SBC 803.5]
- 4. Folding partitions must comply with interior finish requirements. [SBC 803.1.2]

VII. MECHANICAL

1. Fire dampers are required where ductwork penetrates a one or more hour wall except in one hour walls where duct penetrating wall is not greater than 100 square inches, there is no duct opening for five feet each side of wall, duct is minimum **26 gauge steel**, and above ceiling. [SMC 610.1 and SBC 705.1.2.2] Show specific location per SMC 610.6.
2. Fire dampers are required where ductwork penetrates a rated floor unless it is enclosed in a rated shaft. [SBC 705.2.1.4.1 and 2002 NFPA 90A 5.3.2] Show specific location per SMC 610.6. Provide details for situations with and/or without fire dampers.
3. Diffusers in rated ceilings must have heat shields in accordance with tested assembly design. [2002 NFPA 90A 5.3.3]
4. Show how combustion air and ventilation are provided for the room containing fuel fired equipment and show size and location of vents. [SMC 704 and 2002 NFPA 54.8.3]
5. Gas piping is not permitted to be installed in concealed spaces unless 1) pipe is joined only by fittings such as elbows, tees, and couplings; 2) tubing is joined by brazing; 3) the fittings are listed for use in concealed space; or 4) where unavoidable to add fittings into the pipe, the pipe shall be reconnected by welding, flanges, or the use of a ground joint union with the nut center-punched to prevent loosening by vibration. Unions, tubing fittings, right and left couplings, bushings, swing joints, and compression couplings made by combinations of fittings shall not be used in concealed locations. [2002 NFPA 54 6.3.2]
6. Gas piping valves must not be located in non accessible spaces or more than six feet away from the appliance being served. [2002 NFPA 54 8.5.4]
7. Each room or space that contains flammable or combustible vapors, noxious gases (i.e., toilets or chemical labs), flammable dusts, or serves incompatible material must be equipped with a separate and independent ventilation system. [SMC 401.2]
8. Chimney, vent or sanitary sewer exhaust outlets within ten feet of fresh air intakes must be at least two feet higher. [SMC 405]
9. Exhaust outlet ducts conveying noxious gases, flammable or corrosive vapors, and ducts serving commercial cooking and processing equipment must terminate outside the building and must be located ten feet from any adjacent building, parking area, adjacent property line, window, door or air intake opening and must be minimum ten feet above adjoining grade level and must terminate 40 inches above roof surface. [SMC 506.1]
10. PVC pipe must be enclosed in a one-hour shaft or firestopped with an approved listed system. [SBC 705.2]

VIII. FIRE SUPPRESSION

1. Provide sprinkler **design intent** information by an engineer competent in the design of fire protection systems who currently has an active Tennessee registration. The design intent must be approved by the State Fire Marshal's Office prior to shop drawings being created and approved by the fire protection engineer of record (processed with the engineer's shop drawing review stamp). [Rule 0780-2-3-.03(1)(a)] See the attached Sprinkler Design Intent correction list.

2. Complete sprinkler **shop drawings** and associated calculations must be drawn and signed by a Tennessee registered fire protection sprinkler contractor's responsible managing employee. The sprinkler shop drawings and associated calculations must be reviewed and approved by the fire protection engineer of record (processed with the engineer's shop drawing review stamp) only after the design intent has been approved by this office. Shop drawing information is generally a stipulation on the plans upon initial approval of the project. [Rule 0780-2-7-.09 and Office Policy]
3. All piping from the "point of service" including underground used for sprinkler or standpipe system must be installed by a Tennessee registered sprinkler contractor. [Rule 0780-2-7-.08] **Show location of "point of service" for the underground sprinkler piping on the site plan and provide a note stating that the installation must be performed by a Tennessee registered sprinkler contractor.** If there is an existing sprinkler system in the building, a Tennessee registered sprinkler contractor must inspect, test, and provide a letter of acceptance or new inspection report for the existing system showing no deficiencies.
4. Provide general layout of sprinkler system and show main risers, related electrical connections, available water supply and design water demand. [2002 NFPA 13]
5. Activation of the sprinkler system must activate the fire alarm system. [SBC 903.8.3]
6. Sprinkler control valve must be electrically supervised. [SBC 903.8]
7. Extinguishing system required by SBC must be connected to the fire department or an approved central station. [SBC 903.8 and NFPA 101 9.7.2.2]
8. Portable fire extinguishers shall be provided per 2003 NFPA 1 Table 13.6.1.2 and 2002 NFPA 10.

IX. ELECTRICAL

1. Provide emergency lighting for exitways, normally occupied windowless spaces and **path of egress travel to a public way**. [NFPA 101 7.8.1, and 14.2.9]
2. Emergency lighting must have stand-by power source (NFPA 101 7.9.2, 2002 NFPA 70, Article 700, and SBC 1016.2.1), automatically providing the required illumination in the event of any interruption of normal lighting in areas where emergency lighting is required by SBC 1016 and NFPA 101 7.8, due to any of the following:
 - A. Failure of a public utility or other outside electrical power supply.
 - B. Opening of a circuit breaker or fuse.
 - C. Manual act(s), including accidental opening of a switch controlling normal lighting facilities.
3. Exit signs must have an emergency power source or be a listed self-illuminating type sign. [NFPA 101 7.10.4, 7.10.5, and SBC 1016.3.3.2]
4. Egress lighting must be installed per NFPA 101 14.2.8.
5. Provide manual fire alarm system if portables are a single room greater than 1,000 square feet, butted together or spaced within 50 feet of main school building or spaced within 50 feet of other structures. [NFPA 101 14.3.4 and SBC 905] Provide fire alarm per 2002 NFPA 72. See Fire Alarm Plan Correction List.

6. Units containing two or more classrooms must be tied into school's fire alarm system. [NFPA 101 14.3.4]
7. In areas not continuously occupied that contain controlling equipment, automatic smoke detection must be provided at each control unit(s) (i.e., fire alarm control panel, etc.). Heat detection is permitted if ambient conditions prohibit installation of smoke detection. [2002 NFPA 72 4.4.5]
8. A three-foot horizontal clearance must be maintained from floor to ceiling in front of electrical panel.
9. Clearance may not be used for storage and may not contain ductwork, piping, etc. [2002 NFPA 70 110.26(a)(1)]
10. Working space(s) in front of electrical equipment is a minimum of three-foot horizontal, six and a half foot vertical and thirty inches minimum width. [2002 NFPA 70 110.26(A)(1-3), Table 110.26(A)(1), and 408.8] Dedicated equipment space(s) is equal to width and depth of the equipment extended from floor to a height six feet above equipment or the structural ceiling whichever is less. [2002 NFPA 70 110.26(F)(1)] Working space(s) may not be used for storage and may not contain ductwork, piping, etc.
11. Electrical outlet boxes located on opposite sides of fire rated walls must be separated by a horizontal distance of 24 inches. [SBC 705.5.2]
12. Dry-type transformers installed indoors and rated 112½ kVA or less shall have a separation of at least 12 in. from combustible material unless separated from the combustible material by a fire-resistant, heat-insulated barrier. [2002 NFPA 70 450.21]
13. Individual dry-type transformers of more than 112½ kVA rating shall be installed in a transformer room of fire-resistant construction. Unless specified otherwise in this article, the term fire resistant means a construction having a minimum fire rating of 1-hour unless either exceptions apply. [2002 NFPA 70 450.21]
14. Electrical equipment rated for 1200 amperes or more and over 6 ft wide, containing overcurrent devices, switching devices, or control devices, there shall be one entrance not less than 32 in. wide and 6½ ft high at each end of the working space. [2002 NFPA 70 110.26(C)(2)] Both entrances shall open in the direction of the egress and be equipped with panic bars, pressure plates, or other devices that are normally latched but open under simple pressure. [2002 NFPA 70 110.26(C)(2) and NFPA 101 7.2.1.2.4]
15. Individual dry-type transformers of more than 112½ kVA rating shall be installed in a transformer room of minimum 1-hour fire-resistant construction, unless specified otherwise in Article 2002 NFPA 70 450.21(B).